N,N'-Diethyloxamide

Other names:	Ethanediamide, N,N'-diethyl- Oxamide, N,N'-diethyl- N,N'-Diethyloxalamide
Inchi:	InChI=1S/C6H12N2O2/c1-3-7-5(9)6(10)8-4-2/h3-4H2,1-2H3,(H,7,9)(H,8,10)
InchiKey:	FFYAVOJIYAAUNX-UHFFFAOYSA-N
Formula:	C6H12N2O2
SMILES:	CCNC(=O)C(=O)NCC
Mol. weight [g/mol]:	144.17
CAS:	615-84-9

Physical Properties

Property code	Value	Unit	Source
gf	-79.42	kJ/mol	Joback Method
hf	-285.39	kJ/mol	Joback Method
hfus	24.69	kJ/mol	Joback Method
hvap	55.31	kJ/mol	Joback Method
log10ws	-0.26		Crippen Method
logp	-0.741		Crippen Method
mcvol	118.500	ml/mol	McGowan Method
pc	3708.97	kPa	Joback Method
tb	544.76	K	Joback Method
tc	738.59	K	Joback Method
tf	362.56	K	Joback Method
vc	0.454	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	277.51	J/mol×K	544.76	Joback Method
cpg	287.95	J/mol×K	577.07	Joback Method
cpg	297.87	J/mol×K	609.37	Joback Method
cpg	307.27	J/mol×K	641.68	Joback Method
cpg	316.17	J/mol×K	673.98	Joback Method
cpg	324.57	J/mol×K	706.29	Joback Method

cpg	332.50	J/mol×K	738.59	Joback Method

Sources

NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C615849&Units=SI
Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772

Legend

cpg:	Ideal gas heat capacity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume